## REMARKS

In response to paragraph 1 of the Office action, the word "comprising" has been removed from the Abstract.

In response to paragraph 2 of the Office action, the claims have been amended to replace "odd extrema" with --first extrema-- (the extrema produced from the values in the odd positions within the original data set) and to replace "even extrema" with --second extrema-- (the extrema produced from the values in the even positions within the original data set). The dependency of claim 29 has been changed from claim 21 to claim 22. In view of those changes, it is believed that the rejections under 35 U.S.C. § 112, 2$^{nd}$ paragraph, have been overcome.

It is respectfully submitted that each of the claims in the instant application produces a useful, concrete, and tangible result. For example, claim 1 recites a method for finding a global extrema for an n-dimensional array. The first step of claim 1 recites determining, within each of the processing elements, a dimensional extrema for a first dimension, wherein the dimensional extrema is related to one or more local extrema of the processing elements in the first dimension. For example, that step would read on calculating an extrema for each row of Fig. 7. The next step of claim 1 is determining within each of the processing elements a next dimensional extrema for a next dimension, wherein the next dimensional extrema is related to one or more of the first dimensional extrema. For example, that would read on determining an extrema for each column in Fig. 7. The next step of claim 1 is to repeat the determining steps within each of the processing elements for a next dimensional extrema until a global extrema is found for the array. The global extrema is then saved.

A global extrema is a number which has meaning in the real world. See, for example, paragraph 10 of the instant application. The recited method is useful in that it determines a global extrema for an array of processing elements. The method recited in claim 1 is concrete in that it is repeatable. A specific value, a global extrema, is determined and stored for future use. The stored global extrema is tangible in the sense that it has meaning in the real world and is therefore not abstract.

The same is true of claims 14 and 22, which recite steps for determining a dimensional extrema which is then stored. The methods recited in claims 14 and 22 are useful in that they determine a dimensional extrema for a group of processing elements positioned within one dimension. The methods recited in claims 14 and 22 are concrete in that they are repeatable. A specific value, a dimensional

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extrema, is determined and stored for future use. The stored dimensional extrema is tangible in the sense that it has meaning in the real world, and is therefore not abstract.

Independent claim 30 is an apparatus claim which corresponds to method claim 1. For the same reasons set forth above with respect to claim 1, it is believed that apparatus claim 30 sets forth subject matter which is useful, concrete, and tangible.

In paragraph 4 of the Office action, claims 1-30 are provisionally rejected under the judicially created doctrine of the obviousness-type double patenting as being unpatentable over claims 1-31 of copending Application No. 10/689,449. Claims 14-21 are provisionally rejected under the judicially created doctrine of the obviousness-type double patenting as being unpatentable over claims 14-21 and 28-30 of copending Application No. 10/689,335. It is respectfully submitted that the provisional obviousness-type double patenting rejections are improper inasmuch as the two copending applications have the same filing date as the instant application, i.e., neither of the copending applications has an earlier effective filing date. As a result, there can be no unjustified or improper time-wise extension of the "right to exclude" granted by the instant application should it issue as a patent. For that reason, it is respectfully requested that the obviousness-type double patenting rejections be withdrawn.

It is applicant's position that all of the objections raised in the Office action have been addressed by the applicant. Accordingly, applicant is of the opinion that claims 1-30 are in condition for allowance. If the examiner is of the opinion that the instant case is in condition for disposition other than through allowance, the examiner is respectfully requested to contact the applicant's attorney at the number listed below.

Respectfully submitted,

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